997

What Is Claimed Is:

- 1. Organ stabilizing apparatus comprising:
- a contact member disposed for contacting an organ;

a support structure attached to the contact member and including a plurality of ball elements and interposed ring elements including contiguous engaged surfaces assembled in an extended array, each of said ball and ring element including an internal bore therethrough, and including a flexible tensioning element within the internal bore disposed to exert compressive force on the assembled array of ball and ring elements to form a rigid support for the contact member in response to tensioning the flexible member within the internal bore

- 2. Organ stabilizing apparatus as in claim 1 in which the internal bore in at least one of each of the ball and ring elements tapers inwardly from an end thereof for positioning the tensioning element substantially within the center thereof.
- 3. Organ stabilizing apparatus as in claim 2 in which the internal bore in each of the ball and ring elements tapers inwardly from each end thereof.

- 4. Organ stabilizing apparatus as in claim I in which the contiguous engaged surfaces of each of one of the ball and ring elements includes a segment of substantially spherical configuration, and each of the other of ball and ring elements includes discontinuous contact surfaces arrayed about a substantially spherical configuration to form the contiguous engaged surface thereof in mating engagement with the segment of substantially spherical configuration.
- 5. Organ stabilizing apparatus as in claim 4 in which each of the ball elements includes a segment of substantially spherical configuration at each end thereof; and

each of the ring elements includes at each of the ends thereof stepped edges oriented at different radii from a central axis of the internal bore therethrough in an array of such edges along the central axis that substantially conforms to the spherical segment of a mating ball element.

6. Organ stabilizing apparatus as in claim 1 in which the tensioning element is attached at a distal end thereof to the contact member and at a proximal end thereof to adjustment apparatus disposed to exert tensioning force thereon relative to the assembled array of ball and ring elements.

- 7. Organ stabilizing apparatus as in claim 1 in which a ball element includes a segment of spherical configuration at an end thereof forming the contiguous engaged surface thereof for mating with a contiguous engaged surface of an adjacent ring element, and includes a shoulder extending radially outwardly from the central bore to a dimension greater than the maximum radius of the segment of spherical configuration for abutting an adjacent ring element to limit angular orientation of the ball element relative to an adjacent ring element.
- 8. Organ stabilizing apparatus as in claim 1 in which the contiguous engaged surface of each ring element includes resilient material disposed to conform to a mating contiguous engaged surface of an adjacent ball element.
- 9. Organ stabilizing apparatus as in claim 8 in which each of the ring elements is formed of a resilient material.
- 10. Organ stabilizing apparatus as in claim 1 in which each ball element is formed substantially as a spheroid including an equatorial band at greater radius than the spheroidal radius and oriented substantially coaxial to a central axis of the internal bore.

- 11. Organ stabilizing apparatus as in claim 6 the distal end of the tensioning element includes a lateral bar disposed in transverse rotatable attachment to the contact member.
- 12. Organ stabilizing apparatus as in claim 11 in which one of the lateral bar and contact member is disposed in rotatable orientation within a mating lateral groove in a distal end of the assembled array of ball and ring elements for angular adjustment of the contact member about an axis transverse to the tensioning element.
- 13 Apparatus for stabilizing a patient's organ at a surgical site, comprising:

contact member disposed to be positioned adjacent the organ, and including a layer of textile material disposed on a surface to contact a surface of the organ that includes fabric material of a selected thickness in a range between about .015 inches and about .064 inches; and

a supporting structure attached to the contact member.

14. Apparatus for stabilizing a patient's organ at a surgical site, comprising:

contact member disposed to be positioned adjacent the organ, and including a layer of textile material including rayon fibers disposed on a surface to contact a surface of the organ; and

a supporting structure attached to the contact member.

15. Apparatus for stabilizing a patient's organ at a surgical site, comprising:

contact member disposed to be positioned adjacent the organ, and including a layer of non-woven fiberous textile material disposed on a surface to contact a surface of the organ; and

a support structure attached to the contact member.

16 Organ stabilizing apparatus comprising:

a contact member disposed for contacting an organ and including a layer of textile material including non-woven rayon fibers on a surface of the contacting member disposed for positioning adjacent the organ.

17. Organ stabilizing apparatus comprising:

a contact member disposed for contacting an organ and including a plurality of layers of fiberous textile material on a surface of the contacting member disposed for positioning adjacent the organ.

- 18. Organ stabilizing apparatus as in claim 1 in which the internal bore in at least one of each of the ball and ring elements tapers inwardly from an end thereof for positioning the tensioning element substantially within the center thereof.
- 19. Organ stabilizing apparatus as in claim 1 in which the internal bore in at least one of the ball and ring elements tapers inwardly from each end thereof.